

Incidence of Noncutaneous Melanomas in the U.S.

Colleen C. McLaughlin, M.P.H., Xiao-Cheng Wu, M.P.H., Ahmedin Jemal, D.V.M., Ph.D., Howard J. Martin, Ph.D., Lisa M. Roche, M.P.H., Ph.D., Vivien W. Chen, Ph.D.

Background: Description of the epidemiology of noncutaneous melanoma has been hampered by its rarity. The current report was the largest in-depth descriptive analysis of incidence of noncutaneous melanoma in the United States, using data from the North American Association of Central Cancer Registries.

Methods: Pooled data from 27 states and one metropolitan area were used to examine the incidence of noncutaneous melanoma by anatomic subsite, gender, age, race, and geography (northern/southern and coastal/noncoastal) for cases diagnosed between 1996 and 2000. Percent distribution by stage of disease at diagnosis and histology were also examined.

Results: Between 1996 and 2000, 6691 cases of noncutaneous melanoma (4885 ocular and 1806 mucosal) were diagnosed among 851 million person-years at risk. Ocular melanoma was more common among men compared with women (6.8 cases per million men compared with 5.3 cases per million women, age-adjusted to the 2000 U.S. population standard), whereas mucosal melanoma was more common among women (2.8 cases per million women compared with 1.5 cases per million men). Rates of ocular melanoma among whites were greater than eight times higher than among blacks. Rates of mucosal melanoma were approximately two times higher among whites compared with blacks.

Conclusions: In contrast to cutaneous melanoma, there was no apparent pattern of increased noncutaneous melanoma among residents of southern or coastal states, with the exception of melanoma of the ciliary body and iris. Despite their shared cellular origins, both ocular and mucosal melanomas differ from cutaneous melanoma in terms of incidence by gender, race, and geographic area.